DESIGN REQUIREMENTS FOR THE CITY OF CHICO

General

- Governing **Building Standards** to be the "International Building Code", 2009 Edition, as adopted and modified by the State of California in reference to the 2010 California Building Code.
- Governing **Residential Standards** to be the "International Residential Code", 2009 Edition, as adopted and modified by the State of California in reference to the 2010 California Residential Code.
- Governing **Electrical Standards** to be the "National Electrical Code", 2008 Edition, as adopted and modified by the State of California in reference to the 2010 California Electrical Code.
- Governing **Mechanical Standards** to be the "Uniform Mechanical Code", 2009 Edition, as adopted and modified by the State of California in reference to the 2010 California Mechanical Code.
- Governing **Plumbing Standards** to be the "Uniform Plumbing Code", 2009 Edition, as adopted and modified by the State of California in reference to the 2010 California Plumbing Code.
- Governing **Fire Regulation Standards** to be the "International Fire Code", 2009 Edition, as adopted and modified by the State of California in reference to the 2010 California Fire Code.
- Governing **Energy Standards** to be the California Energy Standards, 2010 Edition.
- **Required plan size to be 24" X 36" sheet.**

Gravity Loads

- In accordance with 2010 California Building Code (Chapter 16) and ASCE 7-05.
- No snow load.

Wind Loads

- In accordance with 2010 California Building Code (Chapter 16) and ASCE 7-05.
- (Wind design is now based on 3-second gust instead of fastest-mile wind speed. Basic 3-second gust wind speed for City of Chico is 85 mph.) (Figure 1609)

Seismic Loads

- In accordance with 2010 California Building Code (Chapter 16) and ASCE 7-05.
- When soil properties are not known Site Class D shall be used. (Section 1613.5.2) Site Class definitions are in Table 1613.5.2.

- (Seismic Design Category (SDC) replaces seismic zone. Seismic Design Category defines permissible structural systems, limitations on height and irregularity, permitted lateral force procedure, and required level of strength and seismic detailing. SDC ranges from A through F and is dependent on ground motion, soil characteristics and occupancy category. Most structures in City of Chico will be in SDC D).

Soils and Foundations

- In accordance with 2010 California Building Code (Chapter 18) and ASCE 7-05.
- Soil Site Class is D with a bearing of 1500 psf or as specified in a soil report.
- Lateral bearing below natural grade to be 200 psf/f or as specified in a soil report.
- Frost line depth = 0"

Concrete

- In accordance with 2010 California Building Code (Chapter 19) and Reference Standard "*Building Code Requirements for Structural Concrete*" (ACI 318-08).
- 3000 psi compressive strength concrete required for structures assigned to SDC D, E or F. (Exception: light-framed construction, 2 stories or less in height may use 2500 psi concrete).

Masonry

- In accordance with 2010 California Building Code (Chapter 21) and Reference Standard "*Building Code Requirements for Masonry Structures*" (ACI 530-08 / ASCE 5-08 / TMS 402-08).
- Half-Stress" design of masonry without special inspection is not permitted.
- All masonry requires a minimum level of special inspection (1704.5)

Steel

- In accordance with 2010 California Building Code (Chapter 22) and Reference Standard "*Specification for Structural Steel Buildings*" (AISC 360-05). AISC 360-05 combines LRFD and ASD. AISI S100-2007 for Cold-Formed Steel.
- Structural steel structures assigned to SDC D, E or F shall be designed and detailed in accordance with AISC 341-05, Part I. (2205.2.2)

Wood

- In accordance with 2010 California Building Code (Chapter 23) and Reference Standard "*National Design Specifications for Wood Construction*" 2005 Edition combines LRFD and ASD.
- An engineered lateral design is required for irregularly shaped buildings as defined in 2308.12.6.
- Conventional construction is limited to one story in SDC D and E and 2 stories in SDC C. (Except detached one and two family dwellings

may be 2 stories in SDC D&E and 3 stories in SDC C). (2308.11 and 2308.12)

- Cripple walls with studs exceeding 14" are considered a story for the purposes of applying braced wall requirements. (2308.2, 2308.9.4.1 and 2308.12.4)
- For conventional bracing use column .50 < Sds < .75 of Table 2308.12.4.

Special Inspection

- In accordance with 2010 California Building Code (Chapter 17).
- Unless otherwise required by the Building Official, Group U occupancies accessory to residential occupancies are exempt from special inspections. (1704.1 exception 3)